

## Fasciation in *Lespedeza Sieboldii* Miq.

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*Lespedeza Sieboldii* Miq., commonly known as bush clover, is a graceful ornamental shrub or undershrub which has been introduced into this country from Japan. Each year strong wiry shoots are sent up from the crown. It blooms profusely from



Normal and fasciated shoots of *Lespedeza Sieboldii* Miq.

The fasciated stems (right) bear irregularly placed, short-petioled leaves which are smaller and more numerous than those on the normal stem. The inflorescences on the flattened shoots are increased in number, crowded, and lack the normal alternate arrangement. (Some inflorescences and leaves were removed at various places to give a better view of the flattened stems.) The small split-off section of the left abnormal stem shows spiral torsion as did several branches not photographed.

August to October in this latitude and is prized for its abundant late rose-purple flowers which droop in numerous long racemes.

A handsome specimen of this species was observed to show marked stem fasciation for the first time this summer. The shrub which sent up numerous shoots ranging from 6 to 8 feet in length, exhibited fasciation in approximately one-third of its shoots. The branches which are normally almost terete showed flat, ribbon-like expansions from one-fourth to an inch or more in width. In cases where the growth was equal on both sides the stem retained its straight direction but in many stems the growth on one side was more rapid and vigorous than on the other and spiral torsion resulted. In some cases the stem curved so that complete circles were formed. Irregularly placed, short-petioled leaves which were smaller and more numerous than those on the normal stem occurred on the fasciated shoots. The inflorescences also were greatly increased in number and grew in crowded masses in abnormal positions.

A search of the literature showed no account or figure of fasciation of *Lespedeza* occurring in America. Figini<sup>1</sup> in an article on inheritance of fasciation of *Antirrhinum majus* mentions fasciation of *Desmodium penduliflorum*, a name sometimes given as a synonym for this species.

No cause for the malformation is evident. Cultural methods have been the same as in previous years and there is no evidence of injury to the initial meristem either by fungi or by the action of insects. *Lespedeza Sieboldii* can be grown by division of the clump or by cuttings. An attempt will be made to propagate the fasciated shoots by both of these methods and further observations will be made on the original plant to determine if possible whether the fasciation is of germinal or somatic origin.

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<sup>1</sup> Figini, G. P. L'ereditarieta della fasciazione nell' *Antirrhinum majus* L. Nuovo Gior. Bot. Ital. 33(1): 65-87. 1926. (Biol. Absts. 1:8564. 1926-27.)